SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0001
Model :	SEE BELOW	**Bulletin Date :**	JAN.30.1997
Buyer :	All the concerned Subsidiaries	**ECN # & Date :**	

SUBJECT : VP-U12, Parts Information - Zoom Lens (Samsung & Canon brand)

* Application Models : VP-U12/VP-U15/VP-J52/VP-H65/VP-H66

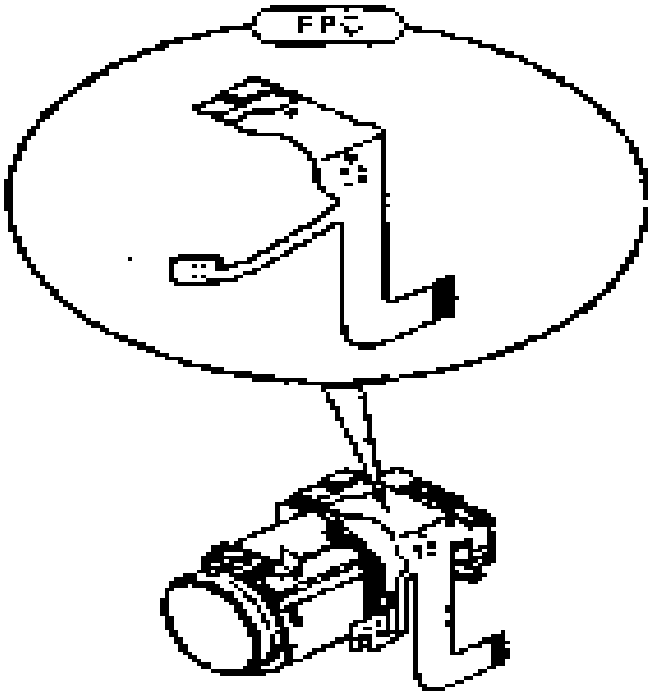
1.Background : During production, two different Zoom-Lens are being utilized.

(Symptom) They are either a Canon or Samsung Lens. These Lens are not interchangeable. When ordering the Zoom-Lens, Auto Board (only for Model VP-J52), Process Board (only for Model VP-U12/VP-U15) & Camera Main Board (only for Model VP-H65/VP-H66), check to see which Zoom-Lens is in the unit before you order the above mentioned parts.

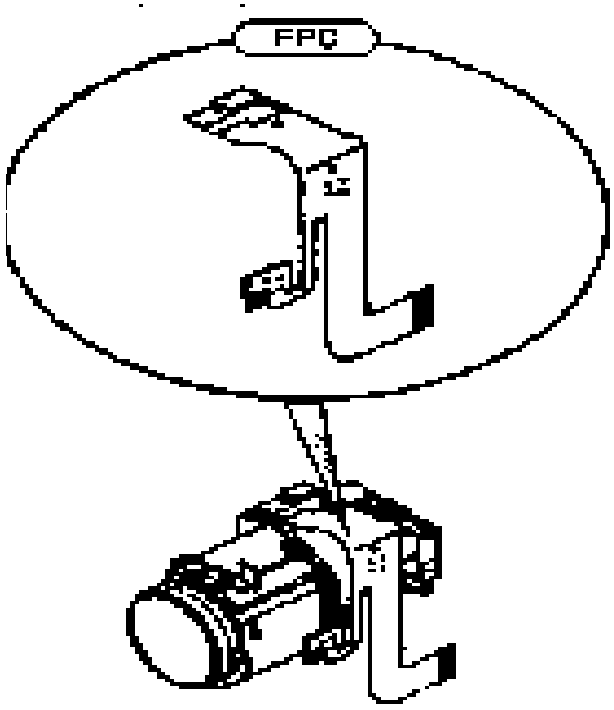
2. How to identify the Zoom-Lens

¢Ñ Zoom-Lens is identified by the type of FPC as shown below.

CANON LENS



SAMSUNG LENS



Published by :	**Checked by :**	**Approved by :**

Bulletin No. 97-CAM-E0001

3. Parts Status by the X12 Zoom-Lens

ITEMS	X12 CANON LENS		X12 SAMSUNG LENS	
	CLASS	PART-NO.	CLASS	PART-NO.
Ass'y Zoom - Lens	154G-VE D27	AC67-12079A	Employed EPSON Motor	AC98-10009S
	154G-D27	62719-0039-00	Employed SAMHONG co. Mo	AC98-10009S
Interchangeability	100% interchangeable		100% interchangeable	
Motor - Zoom	Tokyo Micro 1	66829-0048-00	Employed EPSON Motor	66829-0073-00
	Tokyo Micro 2	-	Employed SAMHONG co. Mo	AC31-12002G
Interchangeability	Not interchangeable		Not interchangeable	
Motor - Focus	Tokyo Micro 1	AC31-12001Z	Employed EPSON Motor	66829-0074-00
	Tokyo Micro 2	-	Employed SAMHONG co. Mo	AC31-12002H
Interchangeability	Not interchangeable		Not interchangeable	
Auto Board	VP-J52 /Canon	AD90-10812J	VP-J52/PAL	AC90-10009U
Process Board	VP-U12 /Canor	AD90-10812K	VP-U12/PAL	69063-214-190
Camara Main Board	VP-H66 /Canor	AD90-10812M	VP-H66/PAL	AC90-10006V

4. Service Parts Informations

¢º Canon Zoom-Lens & Samsung Zoom-Lens are not interchangeable.

¢º During production, four different Motor-Zoom & Motor-Focus are being utilized.
These Motors are not interchangeable.

¢º When replacing the Motor-Focus or the Motor-Zoom, be sure to perform the fine adjustment.
But, unfortunately, you can not perform the fine adjustment in the field.
Because you do not have the clean room, special tools used for torque spec. adjustment,etc..

¢º Even if you can replace the Motor-Focus or the Motor-Zoom, an additional defect may be occurred.

¢º Therefore, we can not supply the Motor-Focus & the Motor-Zoom as a service parts in future.
Please, order the Ass'y Zoom-Lens as a service parts.

5. Note: After replacing the Zoom-Lens, be sure to perform the Camera Adjustment as shown Service Manual in order to confirm whether Camera is operated correctly or not.

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0002
Model :	SEE BELOW	**Bulletin Date :**	MAR.06.1997
Buyer :	All the concerned Subsidiaries	**ECN # & Date :**	Jan. 27.1998

SUBJECT : VP-U12, Revision of SVC Bulletin (Bulletin No. : 97-CAM-E0001)

* Application Models : VP-U12/VP-U15/VP-J52/VP-H65/VP-H66

1. OUTLINE : There are two kinds of the X12 ZOOM-LENS for the above models as above-mentioned. They are either a Canon or Samsung Lens. These Lens are not interchangeable. Also, When replacing from Canon Lens to Samsung Lens, each board which is assembled to the X12 ZOOM-LENS is changed at the same time. For Part-No. concerning each board by models, see below table.

Items	X12 Canon Lens	X12 Samsung Lens	Application Model
Ass'y zoom lens	AC67-12079A	AC98-10009S	VP-U12/U15/J52/H65/H66
Auto Board	AD90-10812J	AC90-10009U	VP-J52
Process Board	AD90-10812K	69063-214-190	VP-U12/U15
Camera main b'd	AD90-10812M	AC90-10006V	VP-H65/H66

2. HOW TO ORDER THE X12 ZOOM-LENS AS A SERVICE PARTS.

¢º When receiving the parts order, we will supply the X12 ZOOM-LENS with corresponding board as a kit hereafter.

¢º Therefore, please order the X12 ZOOM LENS & the corresponding board simultaneously.

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0003
Model :	VP-H66/H68/H65/J50/J55/J52	**Bulletin Date :**	MAY.24.1997
Buyer :	SEE ATTACHMENT	**ECN Date :**	MAY.24.1997

SUBJECT : VP-H66, Parts Inform - 2'nd source of Delay IC

Background : It needs to prepare 2'nd source of Camcorder delay IC to surely supplied.

(Symptom) It has 100% interchangeable

Application Date : Running change

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	
**** Application Model : VP-H65, VP-H66, VP-H68**					
IC450	AC14-12014F	IC-CCD;CXL1506N	1209-001044	IC-Delay line; CXL5517N	A
**** Application Model : VP-J50, VP-J52, VP-J55**					
IC765	AC14-12014F	IC-CCD;CXL1506N	1209-001044	IC-Delay line; CXL5517N	A

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) / NEW → Late	OLD (Parts) → Early (Prod.) / NEW → Late	OLD (Parts) Early (Prod.) / NEW → Late	OLD → Early (Parts) (Prod.) / NEW → Late	Parts Addition (None ¡æ NEW)	Parts deletion (OLD ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

Published by : **Checked by :** **Approved by :**

¡á **Distribution List and Remarks** *** Bulletin No: 97-CAM-E0003**

No.	Subsidiary Distributor	Country	Applicable Models or Remark
1	AMFO	BENELUX	
2	ANA	RUMANIA	
3	AUTRONIC	SWISS	
4	EAP	CZECHO	
5	EISENBERG	ISRAEL	
6	ERGOSTARS	GREECE	
7	HACO	IRAN	
8	RIEDER	AUSTRIA	
9	SAPL	SINGAPORE	
10	SEAU	AUSTRALIA	
11	SECOSA	SPAIN	
12	SEF	FRANCE	
13	SEG	GERMANY	
14	SEH	HUNGARY	
15	SEI	ITALY	
16	SEMO	RUSSIA	
17	SEPOL	POLAND	
18	SESAB	SWEDEN	
19	SGE	U.A.E	
20	SSA	SOUTH AFRICA	
21	ZAMA	SAUDIARABIA	

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0004
Model :	SCF30/32/34/35	**Bulletin Date :**	MAY.24.1997
Buyer :	SEA, G.Supply	**ECN Date :**	MAY.24.1997

SUBJECT : SCF-30, OSD IC CHANGE

Background : (Symptom) Owing to the insufficient capacity of current supplier, we have used two types of OSD IC as shown below.

(Parts Changed Information)

Application Date : Running Change

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	
IC401	AC14-12012M	IC;BU5998AFS,QFP	AC14-12012L	IC;BU5997AFS,QFP	A

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	Parts Addition (None ¡æ NEW)	Parts deletion (OLD ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

Published by : **Checked by :** **Approved by :**

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0005
Model :	VP-J52	**Bulletin Date :**	MAY.28.1997
Buyer :	SEG	**ECN Date :**	MAY.28.1997

SUBJECT : VP-J52, How to service "Sound Noise" problem

Background : (Symptom) Sound noise occurs when PB mode is activated after recording under condition of "OSD ON"

Cause : Noise is inflamed into the output signal of DATE,TIME due to the interference of MIC AMP.

Solution : Add jumper-wire (2 points) and cut pattern (3 points).
For detailed "How to repair",see attachment.

Application Date : Immediately

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) / NEW → Late	OLD (Parts) → Early (Prod.) / NEW → Late	OLD (Parts) → Early (Prod.) / NEW → Late	OLD (Parts) → Early (Prod.) / NEW → Late	Parts Addition (None ¡æ NEW)	Parts deletion (OLD ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out (0) Exploded View ( )
Mechanical Diagram ( ) None ( ) Others ( )

Product Month : **Serial No.** (~ from)

Published by : **Checked by :** **Approved by :**

¡á Additional Information *** Bulletin No: 97-CAM-E0005**

1. HOW TO SERVICE "SOUND NOISE" PROBLEM

1-1. REPAIR BOARD : MAIN BOARD (BOTTOM SIDE)

1-2. PATTERN CUTTING (3 POINTS)

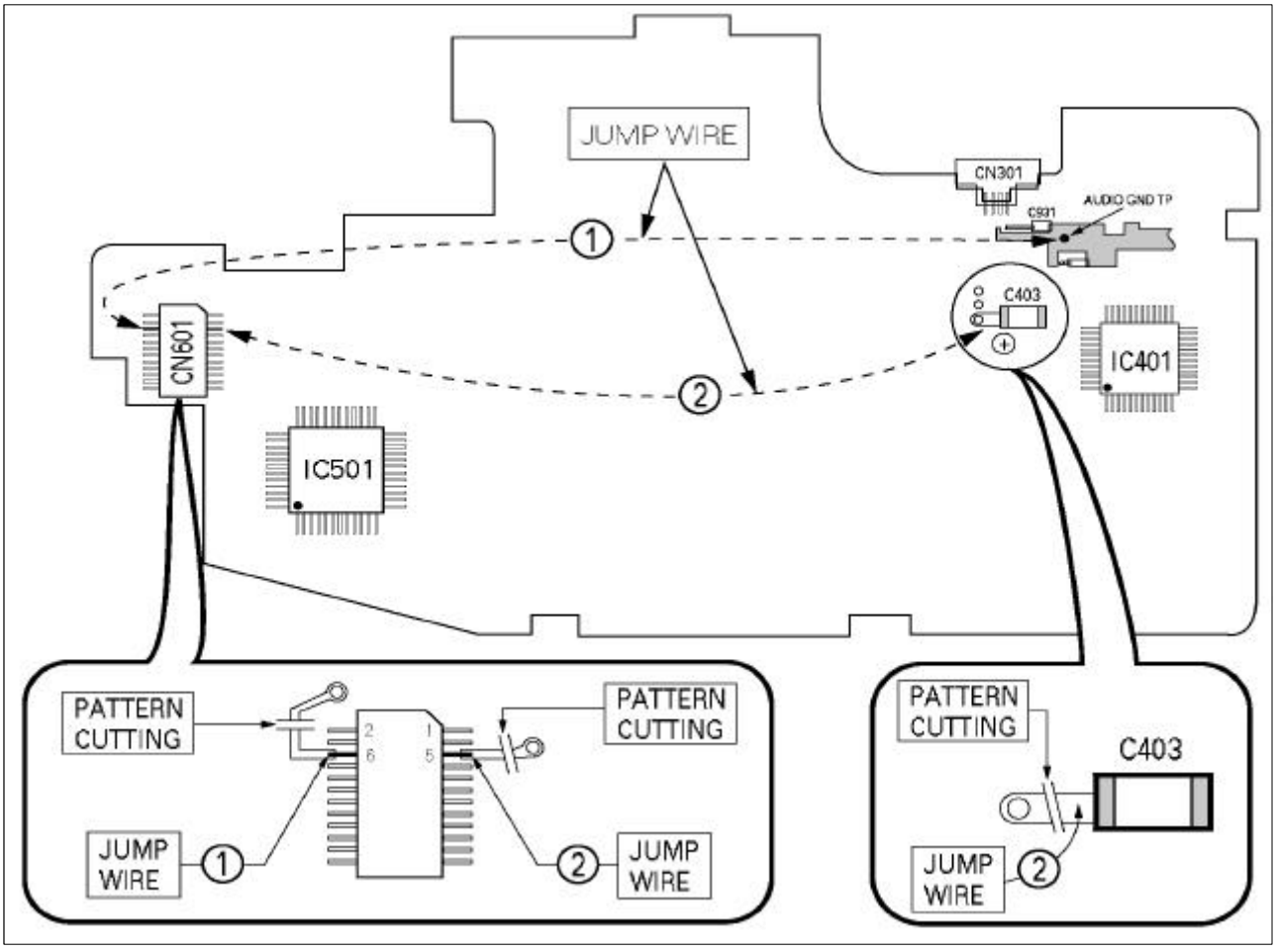
- ¢Ñ Cut the patterns of pin 5 & pin6 of CN601.
- ¢Ñ Cut the pattern of (+) terminal of C403, C-TANTALUM CHIP.

1-3. CONNECTING JUMP WIRE (2 POINTS)

- ¢Ñ Add jump wire between pin 5 lead of CN601 and (+) terminal of C403.
- ¢Ñ Add jump wire between pin 6 lead of CN601 and AUDIO GND terminal (TP point).

1-4. PRECAUTIONS

- ¢Ñ Please, use the thinest jump wire as far as possible.
- ¢Ñ When connecting jump wire, take extreme care not to touch the soldering point.
- ¢Ñ When cutting the patterns using knife, do not force.



SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0006
Model :	SC-A18, VP-A17/A18	**Bulletin Date :**	JUNE. 24. 1997
Buyer :	SEE ATTACHMENT	**ECN Date :**	JUNE. 24. 1997

SUBJECT : SC-A18, Parts change - EIS Micom (CXP811P24R ¡æ CXP81120-108R)

Background : During production, EIS Micom (Loca. No.:ICS15) was changed from OTP type
(Symptom) to Masking type as shown below.
Please place an order the Masking type as a service parts.

* Interchangeability : 100% interchangeable.

Application Date : Running change.

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	
ICS15	AD09-12014S	EIS MICOM; ;CXP811P24R	AD09-10451J	EIS MICOM; CXP81120-108R	A

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	Parts Addition (None ¡æ NEW)	Parts deletion (OLD ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

Published by : **Checked by :** **Approved by :**

¡á Distribution List and Remarks *** Bulletin No: 97-CAM-E0006**

No.	Subsidiary Distributor	Country	Applicable Models or Remark
1	AMFO	BENELUX	
2	AUTRONIC	SWISS	
3	DINDAR	REUNION	
4	EAP	CZECHO	
5	ELSAT	AUSTRIA	
6	EURO	GREECE	
7	K/LUMPUR	MALAYSIA	
8	NSI	DENMARK	
9	S/AFRICA	ETRON	
10	SAPL	SINGAPORE	
11	SEA	USA	
12	SEAU	AUSTRALIA	
13	SEASA	ARGENTINA	
14	SECOSA	SPAIN	
15	SEF	FRANCE	
16	SEG	GERMANY	
17	SEH	HUNGARY	
18	SEI	ITALY	
19	SEM	MEXICO	
20	SEMO	CIS	
21	SEP	PORTUGAL	
22	SEPOL	POLAND	
23	SESAB	SWEDEN	
24	SEUK	UK	
25	SGE	U.A.E	
26	SIMPLEX	CANARY ISLA	
27	SMC	PHILIPINE	
28	TAWIL	LEBANON	
29	TSE	THAILAND	
30	ZAMA	SAUDI ARABIA	

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0007
Model :	SC-A12/A15/A18, VP-A12/A15/A17/A18	**Bulletin Date :**	JUNE. 24. 1997
Buyer :	SEE ATTACHMENT	**ECN Date :**	JUNE. 24. 1997

SUBJECT : SC-A12, Parts change - AF Micom (UPD78P018 ¡æ UPD78014)

Background : (Symptom)

During production, AF Micom (Loca. No.:ICP09) was changed from OTP type to Masking type as shown below.
Please place an order the Masking type as a service parts.

* Interchangeability : 100% interchangeable.

Application Date : Running change.

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	
ICP09	AD11-12001A	AF MICOM; UPD78P018	AD09-12001N	AF MICOM; UPD78014	A

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	Parts Addition (None ¡æ NEW)	Parts deletion (OLD ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

Published by : **Checked by :** **Approved by :**

¡á Distribution List and Remarks *** Bulletin No: 97-CAM-E0007**

No.	Subsidiary Distributor	Country	Applicable Models or Remark
1	AMFO	BENELUX	
2	AUTRONIC	SWISS	
3	DINDAR	REUNION	
4	EAP	CZECHO	
5	ELSAT	AUSTRIA	
6	EURO	GREECE	
7	K/LUMPUR	MALAYSIA	
8	NSI	DENMARK	
9	S/AFRICA	ETRON	
10	SAPL	SINGAPORE	
11	SEA	USA	
12	SEASA	ARGENTINA	
13	SEAU	AUSTRALIA	
14	SECOSA	SPAIN	
15	SEF	FRANCE	
16	SEG	GERMANY	
17	SEH	HUNGARY	
18	SEI	ITALY	
19	SEM	MEXICO	
20	SEMO	CIS	
21	SEP	PORTUGAL	
22	SEPOL	POLAND	
23	SESAB	SWEDEN	
24	SEUK	UK	
25	SGE	U.A.E	
26	SIMPLEX	CANARY ISLA	
27	SLSC	PANAMA	
28	SMC	PHILIPINE	
29	TAWIL	LEBANON	
30	TSE	THAILAND	
31	ZAMA	SAUDI ARABIA	

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	CAMCORDER	**Bulletin No. :**	97-CAM-E0008
Model :	SC-A12 /15 /18, VP-A12 /15 /17 /18	**Bulletin Date :**	Sep. 02. 1997
Buyer :	SEE ATTACHMENT	**ECN Date :**	Aug. 24. 1997

SUBJECT : SC-A12, Parts change - AF Micom (UPD78P018 ¡æ UPD78014)

Background : Horizontal line noise may appear on the CVF (Color View Finder) in STOP mode.
(Symptom)

Cause : The pattern of color signal is open.

Solution : Change Q213 from NPN type to PNP type.

Application Date : REV.03 PCB

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	
Q213	0501-000218	TR-SMALL SIGNAL; 2SC4081, NPN.	0501-000162	TR-SMALL SIGNAL; 2SA1576.PNP.	C

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → NEW; Early (Prod.) → Late	OLD (Parts) → Early (Prod.); NEW → Late	OLD (Parts) ← Early (Prod.); NEW → Late	OLD (Parts) → Early (Prod.); NEW → Late	Parts Addition (None ¡æ NEW)	Parts deletion (OLD ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

ıblished by : J.S. Kang **Checked by : H.M. Kim** **Approved by : J.K. Um**

¡á Distribution List and Remarks *** Bulletin No: 97-CAM-E0008**

No.	Subsidiary Distributor	Country	Applicable Models or Remark
1	Parts change - AF	SINGAPORE	
2	AMFO	BENELUX	
3	AUTRONIC	SWISS	
4	DINDAR	REUNION	
5	EAP	CZECHO	
6	ELSAT	AUSTRIA	
7	ETRON	S/AFRICA	
8	EURO	GREECE	
9	GCS	U.A.E	
10	K/LUMPUR	MALAYSIA	
11	NSI	DENMARK	
12	SEA	USA	
13	SEASA	ARGENTINA	
14	SEAU	AUSTRALIA	
15	SECOSA	SPAIN	
16	SEF	FRANCE	
17	SEG	GERMANY	
18	SEH	HUNGARY	
19	SEI	ITALY	
20	SEM	MEXICO	
21	SEP	PORTUGAL	
22	SEPA	PANAMA	
23	SEPOL	POLAND	
24	SESAB	SWEDEN	
25	SEUK	UK	
26	SIMPLEX	CANARY ISLA	
27	SMC	PHILIPINE	
28	SMSC	CIS	
29	TAWIL	LEBANON	
30	TSE	THAILAND	
31	ZAMA	SAUDI ARABIA	

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	Camcorder	**Bulletin No. :**	97-CAM-E0009
Model :	SC-A12/A14/A15/A18	**Bulletin Date :**	Sep. 24. 1997
Buyer :	SEA, SEM, SEPA	**ECN Date :**	Sep. 04. 1997

SUBJECT : SC-A12, Parts change - AF Micom (UPD78P018 ¡æ UPD78014)

Background : The error of Y/C separation adjystment may be occurred sometimes.
(Symptom)

Cause :

Solution : Y/C separation adjustment was deleted and VR301
was changed from 2.2 kohm to 0 ohm to decrease the error.

Application Date : Running change

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
	SEC Code	Description	SEC Code	Description	
VR301	2104-000119	VR-SMD;2.2KOHM,25%	2007-001641	R-CHIP.MELF;0 OHM, 5%,1/8W	C

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	Parts Addition (None ¡æ New)	Parts deletion (Old ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

Published by : J.S. Kang **Checked by** H.M. Kim **Approved by** J.K. Um

SAMSUNG ELECTRONICS

SERVICE BULLETIN

Product :	Camcorder	**Bulletin No. :**	97-CAM-E0010
Model :	SC-A12/A15/A18, VP-A12/A15/A17/A18	**Bulletin Date :**	Oct 6, 1997
Buyer :	See Attachment	**ECN Date :**	Sep 30, 1997

SUBJECT : SC-A12, Parts change - START/STOP switch

Background : It is occurred "double-operation" intermittently
(Symptom) when START/STOP switch is pressed.

Cause : The height of START/STOP switch on the Rear Board is low.

Solution : START/STOP switch has been changed as belows.

Application Date : Running change

(Interchangeability Code : * **I.C**)

Location No.	**OLD** (before) Parts		**NEW** (changed) Parts		* **I.C**
		Description	SEC Code	Description	
SW901	3404-001031	SW-TACT; EVQ-PLS-A15	3404-000241	SW-TACT; EVQ-QH9-03W	B

Type	**A** type	**B** type	**C** type	**D** type	**E** type	**F** type
Interchange Type Code (* I.C)	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	OLD (Parts) → Early (Prod.) NEW → Late	Parts Addition (None ¡æ New)	Parts deletion (Old ¡æ Del.)

Application Reference (O) Only Defected sets ( ) Whole sets ( )

Attachment Schematic Diagram ( ) Component Lay-out ( ) Exploded View ( )
Mechanical Diagram ( ) None (O) Others ( )

Product Month : **Serial No.** (~ from)

Published by : J.S. Kang **Checked by** H.M. Kim **Approved by** J.K. Um

¡á Distribution List and Remarks

*** Bulletin No: 97-CAM-E0010**

No.	Subsidiary Distributor	Country	Applicable Models or Remark
1	Parts change - AF	BENELUX	
2	AUTRONIC	SWISS	
3	DINDAR	REUNION	
4	EAP	CZECHO	
5	ELSAT	AUSTRIA	
6	ETRON	S/AFRICA	
7	EURO	GREECE	
8	K/LUMPUR	MALAYSIA	
9	NSI	DENMARK	
10	SIMPLEX	CANARY ISLA	
11	TAWIL	LEBANON	
12	ZAMA	SAUDI ARABIA	
13	SAPL	SINGAPORE	
14	SEA	USA	
15	SEAU	AUSTRALIA	
16	SECOSA	SPAIN	
17	SEF	FRANCE	
18	SEG	GERMANY	
19	SEH	HUNGARY	
20	SEI	ITALY	
21	SEM /SEPA	MEXICO/PANAMA	
22	SEMO	CIS	
23	SEP	PORTUGAL	
24	SEPOL	POLAND	
25	SESAB	SWEDEN	
26	SEUK	UK	
27	SGE	U.A.E	
28	SMC/SEASA	PHILIPINE/ARGENTINA	
29	TSE	THAILAND	